

Set notation	Meaning
$\{x_1, x_2, \dots\}$	The set with elements $x_1, x_2, \dots$
$\{x: \dots\}$	The set of all $x$ such that...
$[a, b]$	The closed interval $\{a \leq x \leq b\}$
$[a, b)$	The interval $\{a \leq x < b\}$
$(a, b]$	The interval $\{a < x \leq b\}$
$(a, b)$	The open interval $\{a < x < b\}$
$\cup$	Union (or)
$\cap$	Intersection (and)
$\infty$	Infinity
$-\infty$	Negative infinity

